

The Office Action asserts that Hoj discloses a membrane with a surface that is free of catalyst. The Office Action admits that Hoj fails to disclose the porosity of the membrane, as recited in claim 1. However, the Office Action asserts that Muramatsu discloses such porosity at col. 7, lines 39-46. The Office Action further asserts that it would have been obvious to one of ordinary skill to modify Hoj with the porosity of the membrane disclosed in Muramatsu. However, one of ordinary skill would not have had any reason to try and combine Muramatsu with Hoj.

The porosity disclosed in Muramatsu is intended for a second type of catalyst to coat on. See col. 7, lines 47-59 of Muramatsu. On the other hand, the feature that is assertedly disclosed in Hoj is a membrane free of catalyst. The Office Action fails to establish a reason why one of ordinary skill would combine the porosity intended for a coating of catalyst to a portion that is intended to be free of catalyst. The "motivation" asserted in the Office Action for combining Hoj and Muramatsu appears to be conclusory, and does not appear to address the differences between a layer that is to be coated with catalyst and a membrane that is free of catalyst.

During the personal interview, Examiner Merklings asserted that the teachings of the porosity in Muramatsu does not require catalysts in order to perform the functions disclosed in Muramatsu. In particular, the Examiner asserted that even without the coating of a catalyst, the different porosities at the inlet and outlet would also serve a purpose that is similar to that described in the present application. Based on these assertions, the Examiner stated that it is the porosity disclosed in Muramatsu, regardless whether such porosity is related to the coating of a catalyst, that is asserted to be combined with Hoj. In other words, the Examiner did not believe that the porosity disclosed in Muramatsu must be associated with the catalyst.

However, as discussed during the interview, it is improper for the Patent Office to pick and choose features out of the prior art. In particular, it is improper for the Patent Office to only apply the porosity disclosed in Muramatsu without considering the context in which the porosity of Muramatsu is disclosed. Muramatsu's porosity is disclosed to be used with a catalyst. Thus, it is improper for the Patent Office to take Muramatsu's porosity away from Muramatsu's requirement that the porosity is used in the context of a coating of a catalyst.

Furthermore, for the following additional reasons, one of ordinary skill would not have had any reason to try and combine the teachings of Hoj and Muramatsu.

Muramatsu discloses the necessity of the high density in the outflow side. The term "high density" means a lower porosity, as can be taken from the statement in col. 7, lines 16-18 of Muramatsu. The reason why the outlet side of the disk-shaped, honeycomb-type cordierite filter by Muramatsu is high in the density should come from the fact that catalyst components are coated twice at the outlet side, while a different explanation is made in col. 7, lines 24-38 of Muramatsu. In this regard, please see also the statement in col. 13, lines 25-49 of Muramatsu and the discussion below. That is, the thin layer portion is formed by coating twice with two different types of catalysts. In this regard, "the large pore size" can not be compatible with "the high porosity" in any means.

Moreover, the term "thin layer" in Muramatsu is not equal to the term "fine coating layer" in the present application. The term "fine coating layer" means a layer formed by coating fine particles which are finer (smaller) in the particle size relative to the particles used for forming the honeycomb structure, as can be taken from the description on paragraph [0034] of the present application. In Muramatsu, the thin layer can be formed by method (a) or (b) in col. 7, lines 24-38 of Muramatsu; however, Muramatsu failed to disclose what a size of ceramic particles is unusable for formation of the thin layer in a concrete manner. Muramatsu only discloses that the uncoated end portion having a length of 5 mm was coated

with Pt in Examples 13, 14, 15 and 16 by dipping (impregnating). This portion could be comparable to a thin layer, judging from the description in claim 4 of Muramatsu. Otherwise, Muramatsu does not disclose how the thin layer is formed within the description in Muramatsu, or the thin layer should have been formed by coating ceramic particles all over the filter, as can be taken from the description of those Examples. Furthermore, Muramatsu does not teach plugging (clogging) both of the inlet side through channels (cells) at the outlet side and the outlet side through channels (cells) at the inlet side, alternately in a checkered flag pattern to make each partition wall between an inlet side cell and an outlet side cell as a filter. That is, there is no disclosure suggesting plugging two ends of the "honeycomb filter" by Muramatsu, alternately, in a checkered flag pattern. That is, the expression "the surface of the partition wall on the side of the purified gas outflow cell" in the present application is not comparable to the outlet side of the honeycomb structure disclosed in Muramatsu.

In view of the above, the thin layer is not comparable to the fine layer formed from fine ceramic particles. In particular, one skilled in the art would not unload the catalyst on the thin layer by just reading the description in those Examples while he may not be able to find out where the thin layer formed by coating ceramic particles is located.

In any event, both Hoj and Muramatsu require the presence of the catalyst in cells of the outflow side. However, the present application does not require the presence of the catalyst in the cells of the outflow side, as is defined in claim 1. Thus, Hoj and Muramatsu do not render obvious the subject matter of claim 1, because the technical concept of the present application is entirely irrelevant to those of Hoj and Muramatsu. In this respect, please see the paragraph [0010] of the present specification in comparison with the statement of page 4, lines 4-13 of Hoj and that in col. 1, line 66-col. 4, line 8 and in col. 2, lines 37-40 of Muramatsu.

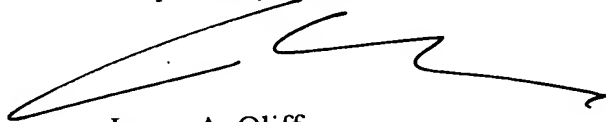
In view of the above, any ordinary artisan would not have had any reason to try to combine the teachings by Muramatsu which is directed to a filter for an exhaust gas containing no fine carbonaceous particles as is described, for example, in col. 2, lines 37-42 of Muramatsu (not an exhaust gas from a diesel engine) with those of Hoj which is directed to an exhaust gas from a diesel engine.

For at least the above reasons, one of ordinary skill would not have had any reason to try to combine Hoj and Muramatsu. Also, Loncke does not cure the deficiencies of Hoj and Muramatsu. Thus, the applied references do not disclose or render obvious the subject matter recited in claim 1, and claims 2 and 4 depending therefrom. Accordingly, withdrawal of the rejection of claims 1, 2 and 4 under 35 U.S.C. §103(a) is respectfully requested.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1, 2 and 4 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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Attachment:  
Petition for Extension of Time

Date: August 25, 2008

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